REMARKS

The claims have been amended to eliminate multiple dependency and to place them in better form for U.S. practice. Favorable action on the application is solicited.

Respectfully submitted,

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CLEAN VERSION OF ALL CLAIMS

1. A process for copolymerizing ethylene or propylene with one another ~~together~~ or with other olefinically unsaturated compounds, which comprises carrying out the polymerization in the presence of a catalyst system which comprises the following components:

A) a complex of a transition metal with one or two substituted or unsubstituted 1,3,5-triazacyclohexane ligands ~~or corresponding ligands in which one or more of the ring nitrogen atoms are replaced by phosphorus or arsenic atoms, and~~

B) if desired one or more activator compounds.

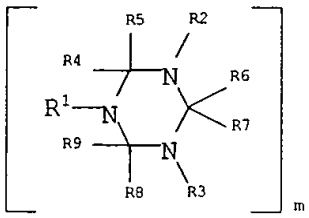
2. A process for copolymerizing ethylene or propylene with one another ~~together~~ or with other olefinically unsaturated compounds at temperatures from 20 to 300°C under pressures from 5 to 4000 bar, which comprises the following steps:

a) contacting a complex of a transition metal with one or two substituted or unsubstituted 1,3,5-triazacyclohexane ligands (A) with at least one activator compound (B),

b) contacting the reaction product from step (a) with the olefinically unsaturated compounds under polymerization conditions.

3. (amended) A process as claimed in claim 1, wherein component (A) is a compound of the formula I

#1



I

in which ~~the variables have the following meanings~~:

M a transition metal of groups 4 to 12 of the periodic table,

R^1-R^9 are hydrogen or organosilicon or ~~carbon~~ organic substituents with 1 to 30 C atoms, it being possible for two geminal or vicinal R^1 to R^9 radicals also to be connected to form a five- or six-membered ring, and it being possible, when m is 2, for an R^1-R^9 radical of in each case one triazacyclohexane ring to form together with a substituent on the other triazacyclohexane ring a bridge between the two rings,

X is fluorine, chlorine, bromine, iodine, hydrogen, C_1-C_{10}-alkyl, C_6-C_{15}-aryl or alkylaryl with 1 to 10 C atoms in the alkyl radical and 6 to 20 C atoms in the aryl radical, trifluoroacetate, BF_4-, PF_6-, or bulky noncoordinating anions,

m is 1 or 2,

n is a number from 1 to 4 which corresponds to the oxidation

state of the transition metal M

~~is employed as component (A).~~

4. (amended) A process as claimed in claim 1, wherein M is a transition metal of group 6 of the periodic table.

5. (amended) A process as claimed in claim 1, wherein mixtures of ethylene with C_3-C_8-α-olefins are employed as monomers.

6. (amended) A process as claimed in claim 1, wherein an aluminoxane is employed as activator compound (B).

7. (amended) A process as claimed in claim 1, wherein a borane or borate having at least 2 substituted aryl radicals is employed as activator compound (B).

8. (amended) A process as claimed in claim 3, wherein at least one of the radicals R^1, R^2 and R^3 is different from the other radicals in this group.

9. (amended) A catalyst for polymerizing olefins, comprising at least one transition metal complex (A) as defined in claim 1 and a support material and, if desired, one or more activator compounds (B).

10. A process for polymerizing or copolymerizing olefins wherein the polymerization or copolymerization is carried out in the presence of a catalyst as claimed in claim 9.

11. A transition metal complex of the formula I ~~as defined in claim 3,~~ wherein at least one of the radicals R^1, R^2 and R^3 is

Completely amended as per Claim 3, except A: R^1, R^2, R^3 are different

different from the other radicals in this group.

12. A transition metal complex of the formula I as defined in claim ~~8~~ 11, wherein m is 2 and one radical R^1-R^9 of one triazacyclohexane ring together with one of these substituents of the other triazacyclohexane ring forms a bridge between the two rings.

13. (amended) The use of a complex of a transition metal as defined in claim 1 in the copolymerization of ethylene or propylene together or with other olefinically unsaturated compounds.

14. Process of claim 3 wherein m=2, one radical R1-R9 of one TCH ring together with one of those substituents of the other TCH ring forms a bridge between two rings